

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/002017

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B05B11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61M B05B A61B F16K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | WO 94/22507 A (ELI LILLY AND COMPANY) 13 October 1994 (1994-10-13) claims; figures | 1,14,16 |
| Y | | 8,10 |
| X | DE 102 33 925 A1 (MICHELER, CLEMENS; RUHLAND, BERND) 12 February 2004 (2004-02-12) paragraphs '0029! - '0048!; claims; figures | 1,14,16 |
| Y | | 8,10 |
| X | DE 201 07 507 U1 (DENTACO DENTALINDUSTRIE UND -MARKETING GMBH) 7 March 2002 (2002-03-07) the whole document | 1,14,16 |
| Y | | 8,10 |
| X | US 6 328 229 B1 (DURONIO JAMES ET AL) 11 December 2001 (2001-12-11) claims; figures 1,3,8,9 | 1,16 |
| Y | | 8,10 |
| | | -/- |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *A* document member of the same patent family

| | |
|--|--|
| Date of the actual completion of the international search 6 October 2005 | Date of mailing of the international search report 28.10.2005 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patenttaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Authorized officer Thanbichler, P |

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PCT/EP2005/002017

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|--|-----------------------|
| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | EP 0 689 874 A (BEHRINGWERKE AKTIENGESELLSCHAFT; AVENTIS BEHRING GESELLSCHAFT MIT BESC) 3 January 1996 (1996-01-03) the whole document | 1, 16 |
| Y | US 4 978 336 A (CAPOZZI ET AL) 18 December 1990 (1990-12-18) column 1, lines 52-66; claims; figures column 2, lines 52-54 | 8, 10 |
| X | US 4 978 336 A (CAPOZZI ET AL) 18 December 1990 (1990-12-18) | 1, 16 |
| Y | column 1, lines 52-66; claims; figures | 8, 10 |
| Y | column 2, lines 52-54 | |
| Y | WO 97/14460 A (SYNTHELABO, S.A; WARD, WILLIAM, JOHN) 24 April 1997 (1997-04-24) | 8, 10 |
| A | claims; figures | 9, 11 |
| A | WO 91/03224 A (POLAK, ROBERT, B) 21 March 1991 (1991-03-21) | 8-11 |
| A | claims; figures | |
| A | EP 1 188 455 A (TRANSCOJECT GESELLSCHAFT FUER MEDIZINISCHE GERAETE MBH & CO. KG) 20 March 2002 (2002-03-20) | 8-11 |
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| A | columns 4-5; figures | |
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| A | figures | |
| A | DE 25 14 201 A1 (IDE, WERNER) 14 October 1976 (1976-10-14) | 14 |
| A | figures | |
| A | US 6 290 682 B1 (MYERS JAN WILLEM MARINUS) 18 September 2001 (2001-09-18) | 12, 13 |
| A | claims; figures | |

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/EP2005/002017**Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7,16,17,19

A delivery system

2. claims: 8-9,10-11,18

A sealing system or a method of sealing for a cartridge

3. claims: 12-13

A self-opening closure system for a cartridge

4. claims: 14,15

A delivery system with a special configuration of compartments and respective pistons

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2005/002017

| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
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| WO 9422507 | A | 13-10-1994 | | AT 156370 T AU 675534 B2 AU 6623694 A BR 9406504 A CA 2159464 A1 DE 69404831 D1 DK 692988 T3 EP 0692988 A1 ES 2105699 T3 FI 954658 A JP 2826196 B2 JP 8503874 T KR 151365 B1 NO 953850 A NZ 265470 A US 5478323 A ZA 9401881 A | 15-08-1997 06-02-1997 24-10-1994 09-01-1996 13-10-1994 11-09-1997 02-03-1998 24-01-1996 16-10-1997 29-09-1995 18-11-1998 30-04-1996 17-08-1998 28-09-1995 24-03-1997 26-12-1995 18-09-1995 |
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| US 6290682 | B1 | 18-09-2001 | | NONE | |